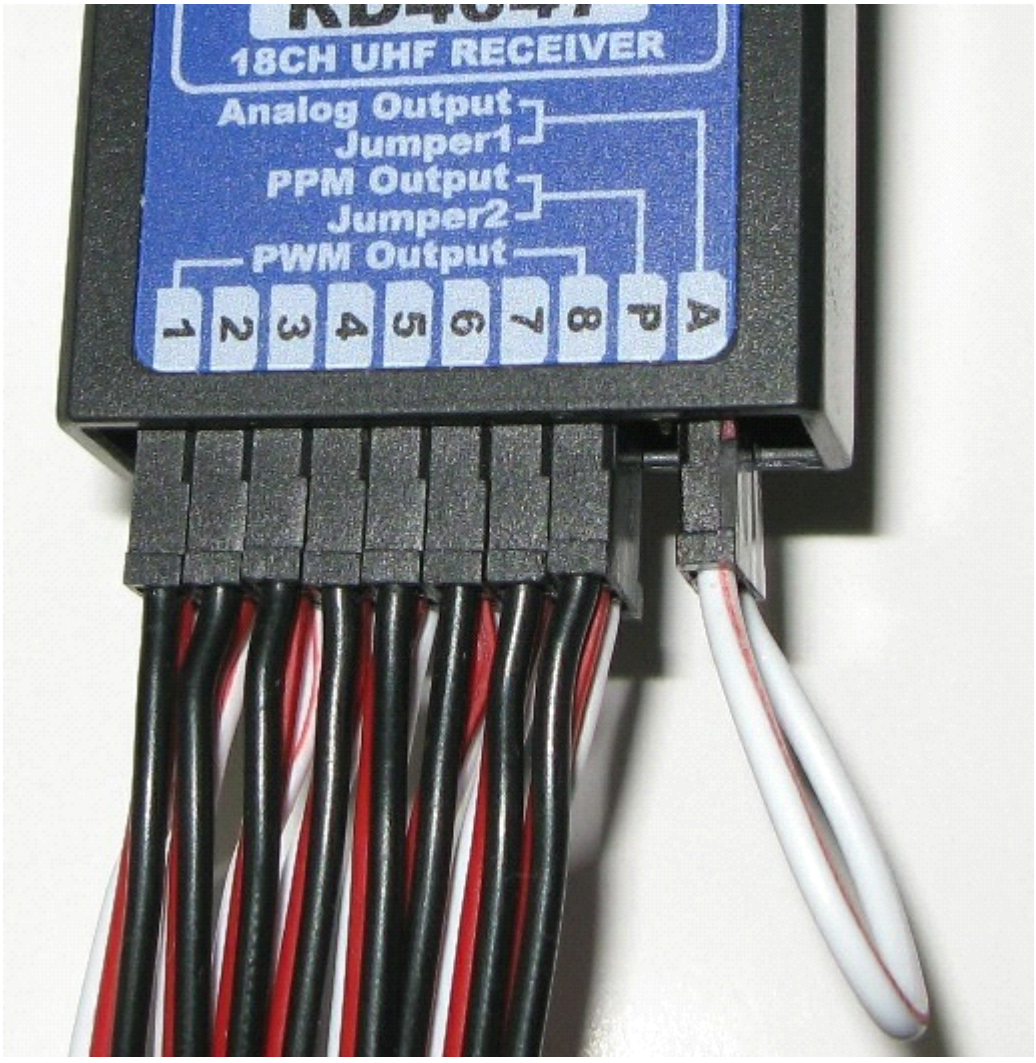
RMILEC 4047 UHF long range RF module operating instructions

1.Forget to connect the antenna,when transmitter working, may lead to serious damage.

2. Receiver

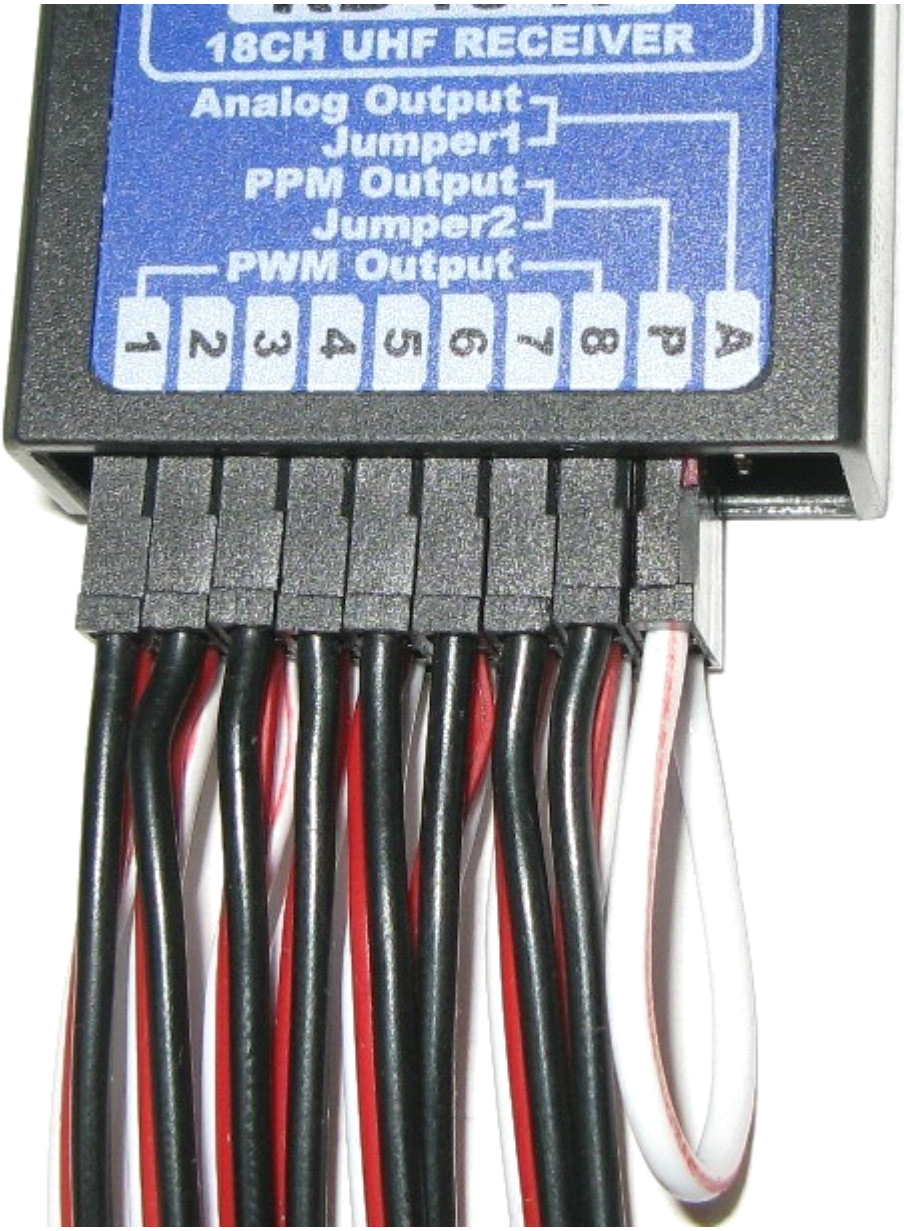
Jumper 1 is used for bind and reset PWM output to standard mode , futaba3003 and some other analog servo use this mode.



Jumper 2 is used for setting PWM output into high frequency mode (Digital Servo signal).

Working with the transmitter's high rate mode you can got a very low delay effect.

Analog servo use this mode may cause abnormal or damage.



PWM 1 -8 : Connect servo . control data come from your radio output CH1-CH8

PPM (S-BUS): Connect PPM decoder or XUFO

According to the transmitter output signal, PPM interface can be configured as 8-channel output mode, and 10-channel output mode

Use PCM mode, after binding PPM interface automatically configured as 10 channels output.

Use more than 8-channel (does not include 8-channel) PPM model, after binding,PPM interface automatically configured as 10 channels output.

Use 8-channel or less than 8-channel PPM model, after binding ,PPM interface automatically configured as 10 channels output.

Working with TS4047 10CH PPM control data come from your radio output CH1-CH10

Working with higher version RF module 10CH PPM control data can come from any interface

Analog : The default setting is RSSI output

Working with higher version RF module, Analog port control data can configured as your radio output CH1-CH10.1-2 ms pulse width corresponding to 0-3.3V voltage

Power supply can use any port, the voltage polarity as shown, the black line indicates negative

The best voltage range is 3-5V, built-in step-up circuit can works very well at low voltage power supply.

If the power supply is very noise and unstable, the minimum supply voltage should be appropriately increased, for example, 4-5V range.

If spply voltage less than 2V. Low-voltage protection circuit may be activated and sensitivity will reduced

The higher the supply voltage, the more severe fever,

In summer maximum voltage should not exceed 6.5V (estimates)

In winter maximum voltage should not exceed 8.5V (estimates)

Receiver built-in reverse battery protection device, but the reversed voltage is still too high can cause damage.

3. Transmitter

Transmitter RF output interface is 50 ohm SMA,open circuit or short circuit will burn RF module in a short time.

Hold down utility button then turn on , you can enter the binding mode

Press utility button for 5S after turn on , Can control the receiver store the current data of all channels

Power output selection switch :Low=30DB. High =33 DB

Rate selection switch:Low=40Hz,High=66Hz

Transmitter power suply range is 8.4-16V

When the voltage is less than 8.4V may result in decreased output power

Recommended to use three large-capacity lithium battery

Note that the transmitter does not have battery reverse protection circuit, reverse polarity power supply will lead to the transmitter scrapped.

4 bind

RD4047 receiver have automatic scanning mechanism for scanning the interference signal of electronic equipment on the model .

Such as DSP processors, on-board computer, digital servo, crystal, cameras, these devices will transmit interference signal and the frequency is no standard, so you must follow the following steps to bind

A. Install the receiver and all other electronic devices

B. Turn on all electronic equipment, and make them into normal operating mode,

C. Short jumper 1 and then power up the receiver

D. Hold down utility button then turn on the transmitte

E. Wait for the transmitter's voice of BBBB,

F.Remove jumper and cycle power all system

Steps C.D can be reversed

Note that the transmitter and receiver binding process is two-way communication process, RF working mode transmit to the receiver, then the receiver scan, scan results data to be sent back to the transmitter, therefore, after binding Transmitter and receiver will have the same ID code and frequency hopping list.

If you replace the receiver, probably because of different working conditions or

individual differences, leading to differences in frequency hopping list, so replace the receiver needs to re-binding. Otherwise, the receiver will can not find the transmitter or delay become longer.

5.The meaning of the buzzer sound

Bi Low-power mode

Bi Bi High-power mode

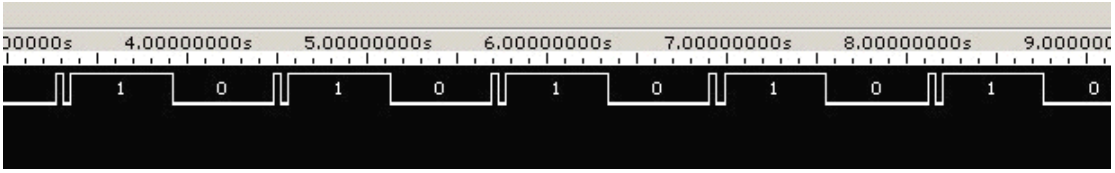
Hua F / S on, the scan is complete

Hua Hua F / S off, the scan is complete

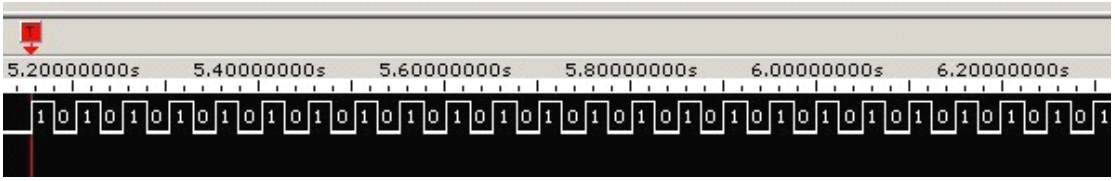
bi bi bi bi ... ... binding successive complete

6.LED Meaning

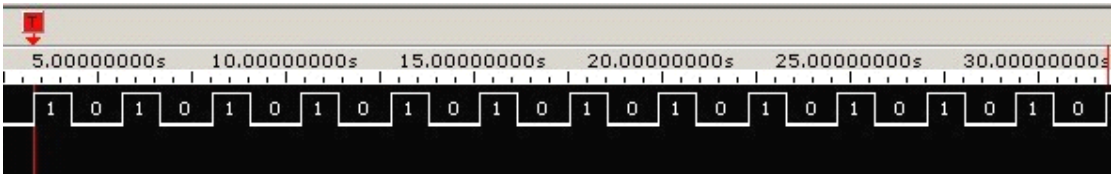
Receiver into the binding mode



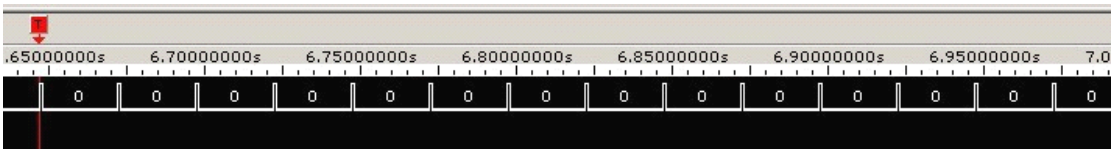
Receiver binding is successful



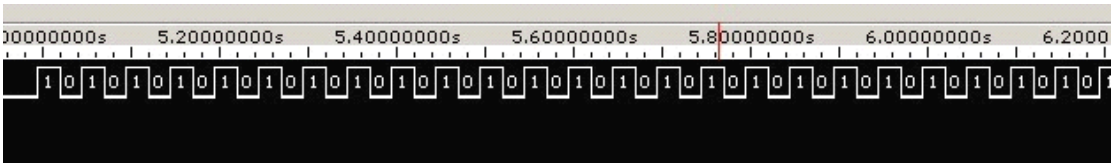
Receiver search mode



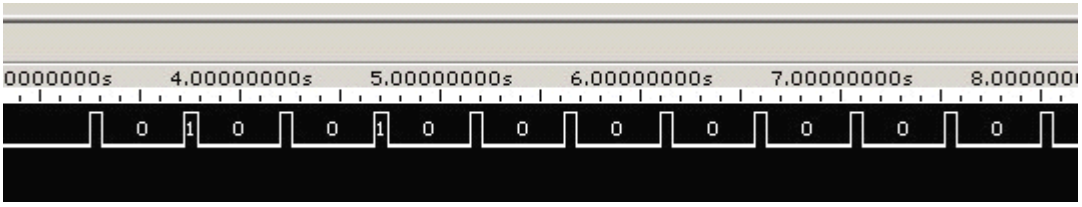
Normal receive mode ,



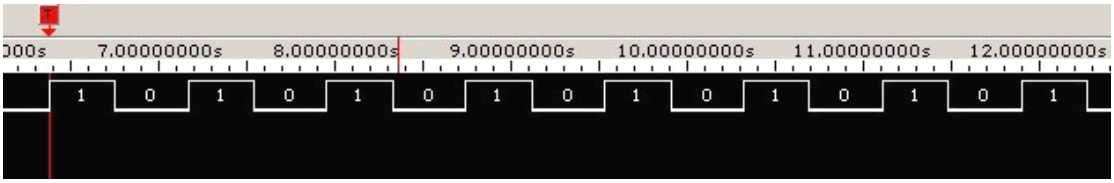
Normal transmit mode ,



Transmitter binding mode



Transmitter damaged

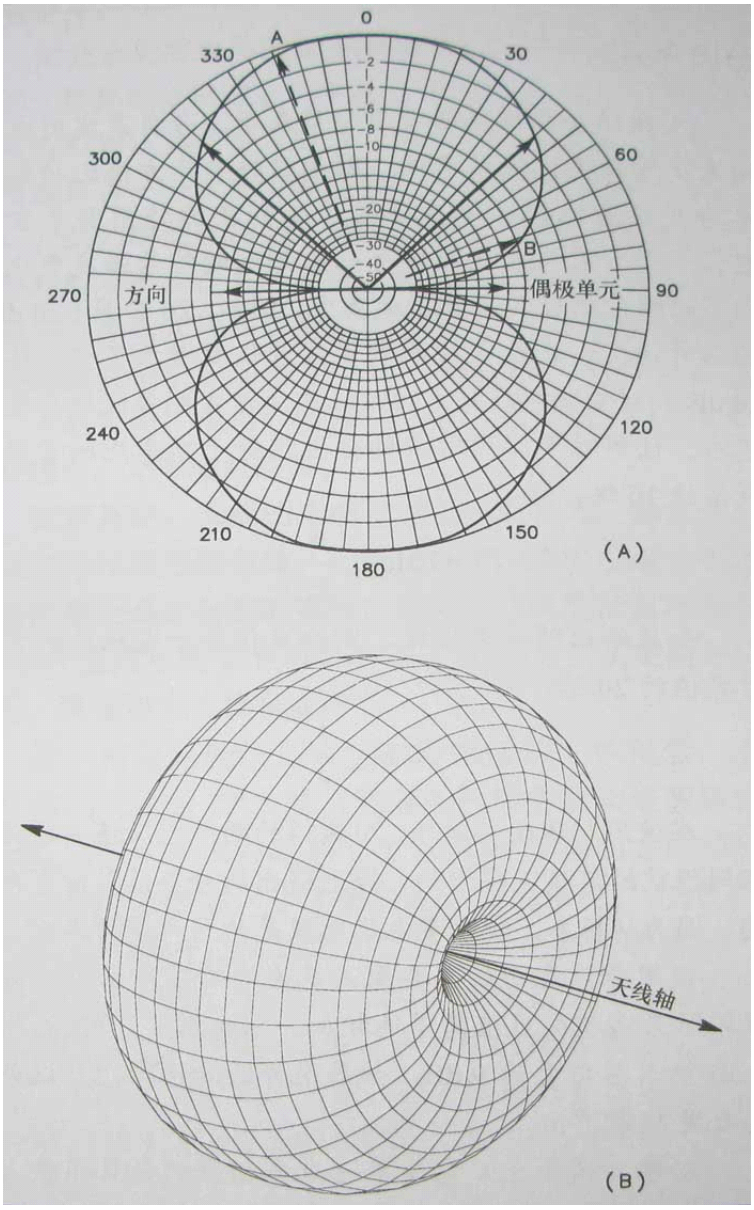


7.How to get the longest distance remote control

A.Keep receiver antenna straight, and about 90 degrees to each other

B.Do not let the conductive material close to receiving antenna

C.Correct antenna angle



D. The correct operation of the binding

E.There is no 350-550Mhz transmitter on plane

F. Open field without obstacles

G. Correct supply voltage

Reference range about 20-60Km

Using high-gain antenna, you can get longer range